



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We make Indiana a cleaner, healthier place to live.*

Joseph E. Kernan  
Governor

Lori F. Kaplan  
Commissioner

October 28, 2003

100 North Senate Avenue  
P.O. Box 6015  
Indianapolis, Indiana 46206-6015  
(317) 232-8603  
(800) 451-6027  
[www.in.gov/idem](http://www.in.gov/idem)

TO: Interested Parties / Applicant

RE: Elkhart Woodworks / 039-16908-00580

FROM: Paul Dubenetzky  
Chief, Permits Branch  
Office of Air Quality

## Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures  
FNPER.dot 9/16/03



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## MINOR SOURCE OPERATING PERMIT OFFICE OF AIR QUALITY

**Elkhart Woodworks, Inc.**  
**52956 Lillian Avenue**  
**Elkhart, Indiana 46514**

Elkhart Woodworks, Inc. (herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 039-16908-00580

Issued by: **Original signed by**  
Paul Dubenetzky, Branch Chief  
Office of Air Quality

Issuance Date: **October 28, 2003**

Expiration Date: **October 28, 2008**

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## SECTION A

## SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in Conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

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The Permittee owns and operates a stationary wood cabinet manufacturing source.

Authorized Individual:	President
Source Address:	52956 Lillian Avenue, Elkhart, Indiana 46514
Mailing Address:	52956 Lillian Avenue, Elkhart, Indiana 46514
General Source Phone:	574 - 262-0199
SIC Code:	2431
County Location:	Elkhart
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Minor Source Operating Permit Minor Source, under PSD or Emission Offset Rules; Minor Source, Section 112 of the Clean Air Act

### A.2 Emissions Units and Pollution Control Equipment Summary

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This stationary source is approved to operate the following emissions units and pollution control devices:

- (a) Two (2) spray booths, identified as Finish Booths 1 and 2, constructed in February 2003, each equipped with dry filters for particulate control and high volume low pressure (HVLP) spray guns, exhausting to Stacks 1 and 2, respectively, capacity: ten (10) wood cabinets and/or panels per hour, total.
- (b) One (1) woodworking operation, equipped with fourteen (14) bag type dust collectors exhausting inside the building, constructed in February 2003, capacity: 108 pounds per hour.
- (c) Natural gas-fired combustion units consisting of:
  - (1) Four (4) radiant heaters, identified as DTH-40-100N, constructed prior to 2003, rated at 0.150 million British thermal units per hour, each; and
  - (2) One (1) air makeup system, identified as 201-N, constructed in February 2003, consisting of one (1) natural gas-fired air preheater for Finish Booths 1 and 2, rated at 2.90 million British thermal units per hour.

## **SECTION B GENERAL CONDITIONS**

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

### **B.1 Definitions**

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

### **B.2 Effective Date of the Permit [IC13-15-5-3]**

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

### **B.3 Permit Term and Renewal [326 IAC 2-6.1-7(a)] [326 IAC 2-1.1-9.5]**

This permit is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions of this permit do not affect the expiration date.

The Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date. If a timely and sufficient permit application for a renewal has been made, this permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.

### **B.4 Annual Notification [326 IAC 2-6.1-5(a)(5)]**

(a) Annual notification shall be submitted to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.

(b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.

(c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Compliance Branch, Office of Air Quality  
Indiana Department of Environmental Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, IN 46206-6015

(d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

### **B.5 Preventive Maintenance Plan [326 IAC 1-6-3]**

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each emissions unit:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing

emission control devices;



- (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
- (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

The PMP extension notification does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.
- (c) A copy of the PMP's shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMP whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

**B.6 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]**

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- (a) Permit revisions are governed by the requirements of 326 IAC 2-6.1-6.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1.

- (c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]
- (d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.

**B.7 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)] [IC 13-14-2-2] [IC 13-20-3-1] [IC 13-17-3-2]**

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Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

**B.8 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]**

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Pursuant to [326 IAC 2-6.1-6(d)(3)] :

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch, within thirty (30) days of the change.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).
- (c) IDEM, OAQ, shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

**B.9 Annual Fee Payment [326 IAC 2-1.1-7]**

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- (a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing.
- (b) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, I/M & Billing Section), to determine the appropriate permit fee.

## SECTION C

## SOURCE OPERATION CONDITIONS

### Entire Source

**C.1 Particulate Emission Limitation For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2]**

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

**C.2 Permit Revocation [326 IAC 2-1.1-9]**

Pursuant to 326 IAC 2-1.1-9 (Revocation of Permits), this permit to operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

**C.3 Opacity [326 IAC 5-1]**

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

**C.4 Fugitive Dust Emissions [326 IAC 6-4]**

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

**C.5 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]**

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are

mandatory. All demolition projects require notification whether or not asbestos is present.

- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
  - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
  - (2) If there is a change in the following:
    - (A) Asbestos removal or demolition start date;
    - (B) Removal or demolition contractor; or
    - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management  
Asbestos Section, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by an "authorized individual" as defined by 326 IAC 2-7-1(34).

- (e) **Procedures for Asbestos Emission Control**  
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and renovation**  
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Accredited Asbestos Inspector**  
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.



## Testing Requirements

### C.6 Performance Testing [326 IAC 3-6]

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- (a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date.

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual date.
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ, not later than forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

## Compliance Requirements [326 IAC 2-1.1-11]

### C.7 Compliance Requirements [326 IAC 2-1.1-11]

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The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U.S. EPA.

## Compliance Monitoring Requirements

### C.8 Compliance Monitoring [326 IAC 2-1.1-11]

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Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and recordkeeping requirements not already legally required shall be implemented when operation begins.

### C.9 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

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Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60, Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

### C.10 Compliance Response Plan - Preparation and Implementation

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- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ, upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the

Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:

- (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.
  - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan, the Permittee shall amend its Compliance Response Plan to include such response steps taken.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
  - (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or
  - (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
  - (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, and it will be 10 days or more until the unit or device will be shut down, then the permittee shall promptly notify the IDEM, OAQ of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.
  - (4) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
  - (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.
  - (3) An automatic measurement was taken when the process was not operating.
  - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.





## Record Keeping and Reporting Requirements

### C.11 Malfunctions Report [326 IAC 1-6-2]

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Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

### C.12 Emission Statement [326 IAC 2-6]

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- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:

Indicate estimated actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);

- (b) The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be submitted to:

Indiana Department of Environmental Management  
Technical Support and Modeling Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

- (c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

**C.13 General Record Keeping Requirements [326 IAC 2-6.1-5]**

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- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all recordkeeping requirements not already legally required shall be implemented when operation begins.

**C.14 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]**

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- (a) Reports required by conditions in Section D of this permit shall be submitted to:  
  
Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015
- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) Unless otherwise specified in this permit, any semi-annual report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

## SECTION D.1

## FACILITY OPERATION CONDITIONS

### Facility Description: Surface Coating

- (a) Two (2) spray booths, identified as Finish Booths 1 and 2, constructed in February 2003, each equipped with dry filters for particulate control and high volume low pressure (HVLP) spray guns, exhausting to Stacks 1 and 2, respectively, capacity: ten (10) wood cabinets and/or panels per hour, total.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards

#### D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-12]

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coating applied to wood furniture and cabinets shall utilize one (1) of the following application methods:

- Airless Spray Application
- Air Assisted Airless Spray Application
- Electrostatic Spray Application
- Electrostatic Bell or Disc Application
- Heated Airless Spray Application
- Roller Coating
- Brush or Wipe Application
- Dip-and-Drain Application

High Volume Low Pressure (HVLP) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

#### D.1.2 Particulate [326 IAC 6-3-2(d)]

- (a) Particulate from the two (2) spray booths shall be controlled by a dry particulate filter, waterwash, or an equivalent control device, and the Permittee shall operate the control device in accordance with manufacturer's specifications.
- (b) If overspray is visibly detected at the exhaust or accumulates on the ground, the Permittee shall inspect the control device and do either of the following no later than four (4) hours after such observation:
- (1) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
  - (2) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
- (c) If overspray is visibly detected, the Permittee shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records

must be maintained for five (5) years.

D.1.3 Preventive Maintenance Plan [326 IAC 1-6-3]

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A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

## SECTION D.2

## FACILITY OPERATION CONDITIONS

### Facility Description: Woodworking

- (b) One (1) woodworking operation, equipped with fourteen (14) bag type dust collectors exhausting inside the building, constructed in February 2003, capacity: 108 pounds per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards

#### D.2.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the woodworking facilities shall not exceed 0.580 pounds per hour when operating at a process weight rate of 108 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and  
P = process weight rate in tons per hour

### Compliance Determination Requirements

#### D.2.2 Particulate Control

In order to comply with Condition D.2.1, the bag type dust collectors for particulate control shall be in operation and control emissions from the woodworking facilities at all times that the woodworking facilities are in operation.

### Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

There are no compliance monitoring requirements specifically applicable to these facilities.

### SECTION D.3

### FACILITY OPERATION CONDITIONS

**Facility Description:** Combustion

(c) Natural gas-fired combustion units consisting of:

- (1) Four (4) radiant heaters, identified as DTH-40-100N, constructed prior to 2003, rated at 0.150 million British thermal units per hour, each; and
- (2) One (1) air makeup system, identified as 201-N, constructed in February 2003, consisting of one (1) natural gas-fired air preheater for Finish Booths 1 and 2, rated at 2.90 million British thermal units per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

There are no conditions specifically applicable to these facilities.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
FAX NUMBER - 317 233-5967**

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ?    Y        N

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION:

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE \_\_\_\_\_ / \_\_\_\_\_ / 20\_\_\_\_ AM / PM

MALFUNCTION REPORTED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_  
(SIGNATURE IF FAXED)



MALFUNCTION RECORDED BY: \_\_\_\_\_ DATE: \_\_\_\_\_ TIME: \_\_\_\_\_

\*SEE PAGE 2

PAGE 1 OF 2

**Please note - This form should only be used to report malfunctions  
applicable to Rule 326 IAC 1-6 and to qualify for  
the exemption under 326 IAC 1-6-4.**

**326 IAC 1-6-1 Applicability of rule**

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

**326 IAC 1-2-39 "Malfunction" definition**

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

\* **Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:



**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE BRANCH**

**MINOR SOURCE OPERATING PERMIT  
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

<b>Company Name:</b>	<b>Elkhart Woodworks, Inc.</b>
<b>Address:</b>	<b>52956 Lillian Avenue</b>
<b>City:</b>	<b>Elkhart, Indiana 46514</b>
<b>Phone #:</b>	<b>(574) 262-0199</b>
<b>MSOP #:</b>	<b>039-16908-00580</b>

I hereby certify that Elkhart Woodworks, Inc. is ☒ still in operation.  
☐ no longer in operation.

I hereby certify that Elkhart Woodworks, Inc. is ☒ in compliance with the requirements of MSOP 039-16908-00580.  
☐ not in compliance with the requirements of MSOP 039-16908-00580.

<b>Authorized Individual (typed):</b>	<b>Gregory Companion</b>
<b>Title:</b>	<b>President</b>
<b>Signature:</b>	
<b>Date:</b>	

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

<b>Noncompliance:</b>

## **Indiana Department of Environmental Management Office of Air Quality**

### **Technical Support Document (TSD) for a Minor Source Operating Permit**

#### **Source Background and Description**

<b>Source Name:</b>	<b>Elkhart Woodworks, Inc.</b>
<b>Source Location:</b>	<b>52956 Lillian Avenue, Elkhart, Indiana 46514</b>
<b>County:</b>	<b>Elkhart</b>
<b>SIC Code:</b>	<b>2431</b>
<b>Operation Permit No.:</b>	<b>MSOP 039-16908-00580</b>
<b>Permit Reviewer:</b>	<b>Mark L. Kramer</b>

The Office of Air Quality (OAQ) has reviewed an application from Elkhart Woodworks, Inc. relating to the operation of a wood cabinet manufacturing source.

#### **Permitted Emission Units and Pollution Control Equipment**

There are no permitted facilities operating at this source during this review process.

#### **Unpermitted Emission Units and Pollution Control Equipment**

The source consists of the following unpermitted facilities/units:

- (a) Two (2) spray booths, identified as Finish Booths 1 and 2, constructed in February 2003, each equipped with dry filters for particulate control and high volume low pressure (HVLP) spray guns, exhausting to Stacks 1 and 2, respectively, capacity: ten (10) wood cabinets and/or panels per hour, total.
- (b) One (1) woodworking operation, equipped with thirteen (13) bag type dust collectors exhausting inside the building, constructed in February 2003, capacity: 108 pounds per hour.
- (c) Natural gas-fired combustion units consisting of:
  - (1) Four (4) radiant heaters, identified as DTH-40-100N, constructed prior to 2003, rated at 0.150 million British thermal units per hour, each; and
  - (2) One (1) air makeup system, identified as 201-N, constructed in February 2003, consisting of one (1) natural gas-fired air preheater for Finish Booths 1 and 2, rated at 2.90 million British thermal units per hour.

#### **New Emission Units and Pollution Control Equipment**

There are no new facilities proposed at this source during this review process.

### Existing Approvals

The source has no previous approvals.

### Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (EF)
Stack 1	Finish Booth #1	20	6	10,000	75
Stack 2	Finish Booth #2	20	6	10,000	75

### Enforcement Issue

- (a) IDEM is aware that equipment has been constructed prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled *Unpermitted Emission Units and Pollution Control Equipment*.
- (b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

### Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on March 11, 2003, with additional information received on June 11, July 24, 30 and 31, as well as August 27, 2003.

### Emission Calculations

See Appendix A pages 1 of 7 of 7 of this document for detailed emissions calculations.

### Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential To Emit (tons/year)
PM	23.9

<b>Pollutant</b>	<b>Potential To Emit (tons/year)</b>
PM <sub>10</sub>	24.0
SO <sub>2</sub>	0.009
VOC	44.1
CO	1.29
NO <sub>x</sub>	1.53

<b>HAPs</b>	<b>Potential To Emit (tons/year)</b>
Xylene	0.825
Toluene	6.15
Glycol Ethers	0.120
MEK	0.029
Methanol	0.029
Ethyl Benzene	0.578
Manganese Compounds	0.00001
Nickel Compounds	0.00003
Chromium Compounds	0.00002
Benzene	0.00003
Dichlorobenzene	0.00002
Formaldehyde	0.001
Hexane	0.028
Lead Compounds	0.00001
Cumene	0.241
Cadmium Compounds	0.00002
<b>TOTAL</b>	<b>8.01</b>

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) VOC is equal to or greater than twenty-five (25) tons per year, but less than one hundred (100) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-6.1.

- (b) Fugitive Emissions

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were

in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

### Actual Emissions

No previous emission data has been received from the source.

### Limited Potential to Emit

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

	Limited Potential to Emit (tons/year)						
Process/facilities	PM	PM <sub>10</sub>	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs
Surface Coating	0.379	0.379	0.00	44.0	0.00	0.00	7.98
Combustion	0.029	0.117	0.009	0.084	1.29	1.53	0.029
Woodworking	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Total Emissions	1.41	1.50	0.009	44.1	1.29	1.53	8.01

### County Attainment Status

The source is located in Elkhart County.

Pollutant	Status
PM <sub>10</sub>	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	maintenance
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Elkhart County has been designated as maintenance attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) Elkhart County has been classified as attainment or unclassifiable for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

### Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)



This existing source based on the emissions summarized in this permit, MSOP 039-16908-00580, is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than one hundred (100) tons per year,
- (b) a single hazardous air pollutant (HAP) is less than ten (10) tons per year, and
- (c) any combination of HAPs is less than twenty-five (25) tons per year.

This is the first air approval issued to this source.

### **Federal Rule Applicability**

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) This wood cabinet manufacturing source is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), 326 IAC14, (40 CFR 63, Subpart JJ) because the source is not a major source as defined by 40 CFR Part 63.2.

### **State Rule Applicability - Entire Source**

#### **326 IAC 1-6-3 (Preventive Maintenance Plan)**

A Preventive Maintenance Plan is not required for the one (1) woodworking operation equipped with bag type dust collectors because the allowable PM emissions do not exceed ten (10) pounds per hour.

#### **326 IAC 2-4.1-1 (New Source Toxics Control)**

The potential to emit of any single HAP from the entire source is less than ten (10) tons per year and the potential emit of any combination of HAPs from the entire source is less than twenty-five (25) tons per year. Therefore, the requirements of 326 IAC 2.4.1-1 do not apply to this source.

#### **326 IAC 2-6 (Emission Reporting)**

Pursuant to 326 IAC 2-6 (Emission Reporting), this source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than ten (10) tons per year of volatile organic compounds (VOCs) in Elkhart County. Pursuant to this rule, the Permittee must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8) (Emission Statement Operating Year).

#### **326 IAC 5-1 (Opacity Limitations)**

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15)

minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### 326 IAC 6-4 (Fugitive Dust Emissions Limitations)

This rule requires the source not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

### State Rule Applicability - Individual Facilities

#### 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)

- (a) Particulate from the two (2) spray booths shall be controlled by a dry particulate filter, waterwash, or an equivalent control device, and the Permittee shall operate the control device in accordance with manufacturer's specifications.

If overspray is visibly detected at the exhaust or accumulates on the ground, the Permittee shall inspect the control device and do either of the following no later than four (4) hours after such observation:

- (1) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
- (2) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

If overspray is visibly detected, the Permittee shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

- (b) Particulate from the one (1) woodworking operation shall not exceed 0.580 pounds of wood per hour when operating at a process weight rate of 108 pounds per hour. This limitation is based on the following equation:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

$$E = 4.10 \times 0.054^{0.67}$$

$$E = 0.580 \text{ pounds per hour}$$

The after control PM emissions from the one (1) woodworking operation are 0.229 pounds per hour. Therefore, the one (1) woodworking operation will comply with this rule. Compliance will be demonstrated by operating the bag type dust collectors at all times when the one (1) woodworking operation is in operation.

326 IAC 8-2-12 (Wood Furniture and Cabinet Coating)

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coating applied to wood furniture and cabinets shall utilize one (1) of the following application methods:

- Airless Spray Application
- Air Assisted Airless Spray Application
- Electrostatic Spray Application
- Electrostatic Bell or Disc Application
- Heated Airless Spray Application
- Roller Coating
- Brush or Wipe Application
- Dip-and-Drain Application

High Volume Low Pressure (HVLP) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

326 IAC 8-11 (Wood Furniture Coatings)

The requirements of 326 IAC 8-11 (Wood Furniture Coatings) are not applicable to this source because the source is not located in Lake, Porter, Clark or Floyd County.

326 IAC 20-14 (Wood Furniture Manufacturing Operations)

The requirements of 326 IAC 20-14 (Wood Furniture Manufacturing Operations) are not applicable to this source because the source is not a major source for HAPs as defined in Section 112 of the Clean Air Act.

**Conclusion**

The operation of this wood cabinet manufacturing source shall be subject to the conditions of the attached proposed Minor Source Operating Permit 039-16908-00580.

**October 28, 2003**  
**Indiana Department of Environmental Management**  
**Office of Air Quality**

Addendum to the  
Technical Support Document for a Minor Source Operating Permit

<b>Source Name:</b>	<b>Elkhart Woodworks, Inc.</b>
<b>Source Location:</b>	<b>52956 Lillian Avenue, Elkhart, Indiana 46514</b>
<b>County:</b>	<b>Elkhart</b>
<b>SIC Code:</b>	<b>2431</b>
<b>Operation Permit No.:</b>	<b>MSOP 039-16908-00580</b>
<b>Permit Reviewer:</b>	<b>Mark L. Kramer</b>

On September 19, 2003, the Office of Air Quality (OAQ) had a notice published in the Elkhart Truth, Elkhart, Indiana, stating that Elkhart Woodworks, Inc. had applied for an operating permit to operate a wood cabinet manufacturing source. The notice also stated that OAQ proposed to issue a permit for this installation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On October 2, 2003, Bob Waugaman of BCA Consultants on behalf of Elkhart Woodworks, Inc. submitted comments on the proposed operating permit. The summary of the comments and corresponding responses are as follows: The permit language, if changed, has deleted language as ~~strikeouts~~ and new language **bolded**.

**Comment 1:**

After rechecking the number of bag type dust collectors on site, I found I had apparently missed one small unit. The 14th unit is a Sen Kong Reliant with only a 500 CFM capacity. The total throughput for the woodshop had already been calculated so this unit should not change the potential emissions. Please change the total number of bag type dust collectors to fourteen (14) in Condition A.2(b) and the related Section D.2 facility description.

**Response 1:**

As stated the change from thirteen (13) to fourteen (14) baghouses at this source is descriptive and does not affect any other conditions besides those identified by Condition A.2(b) and Section D.2. Therefore, the description of the woodworking operation is changed as follows:

**A.2 Emissions Units and Pollution Control Equipment Summary**

This stationary source is approved to operate the following emissions units and pollution control devices:

- (b) One (1) woodworking operation, equipped with **fourteen (14)** ~~thirteen (13)~~ bag type dust collectors exhausting inside the building, constructed in February 2003, capacity: 108 pounds per hour.

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description: Woodworking

- (b) One (1) woodworking operation, equipped with **fourteen (14)** ~~thirteen (13)~~ bag type dust collectors exhausting inside the building, constructed in February 2003, capacity: 108 pounds per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

**Appendix A: Emissions Calculations  
VOC and Particulate  
From Surface Coating Operations**

**Company: Melkhart Woodworks, Inc.  
Address: 52926 Lillian Avenue, Elkhart, Indiana 46514  
MSOP: 039-16908  
Pit ID: 039-00580  
Reviewer: Mark L. Kramer  
Date: March 11, 2003**

Material	Density (lbs/gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (units/hour )	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC (pounds per hour)	Potential VOC (pounds per day)	Potential VOC (tons per year)	Particulate Potential (tons/yr)	lbs VOC/gal solids	Transfer Efficiency
<b>Finish Booths 1 and 2</b>																
<b>Stains</b>																
AL-2047 Replacement	6.53	96.31%	0.00%	96.31%	0.00%	1.70%	0.047	10.0	6.29	6.29	2.96	70.9	12.9	0.124	370	75.0%
Hardwood Carmel Stain	5.85	82.6%	46.0%	36.6%	32.3%	12.0%	0.047	10.0	3.16	2.14	1.01	24.15	4.41	0.524	17.8	75.0%
Chocolate Stain	6.09	79.5%	43.0%	36.5%	31.44%	6.03%	0.047	10.0	3.24	2.22	1.04	25.07	4.58	0.643	36.9	75.0%
Lite Ash Stain	5.78	84.51%	48.0%	36.5%	33.31%	10.6%	0.047	10.0	3.16	2.11	0.99	23.80	4.34	0.461	19.9	75.0%
Lacquer Thinner	7.07	100%	0.00%	100%	0.00%	0.00%	0.001	10.0	7.07	7.07	0.071	1.70	0.310	0.00	N/A	100%
<b>Top Coat</b>																
Valtec S/S W.W. Precat Lacquer	7.68	72.51%	8.50%	64.0%	7.84%	19.94%	0.136	10.0	5.33	4.92	6.69	160	29.3	3.14	24.7	75.0%
Methyl Proxitol Acetate	8.03	100%	0.00%	100%	0.00%	0.00%	0.004	10.0	8.03	8.03	0.321	7.71	1.41	0.00	N/A	75.0%
Butyl Oxitol	7.50	100%	0.00%	100%	0.00%	0.00%	0.000	10.0	7.50	7.50	0.00	0.00	0.00	0.00	N/A	75.0%
<b>Top Coat R-T-S</b>	7.69	73.3%	8.25%	65.1%	7.62%	19.4%	0.140	10.0	5.42	5.00	7.01	168	30.7	3.14	25.8	75.0%
<b>Assembly</b>																
Original Wood Glue 5066	9.16	54.1%	53.8%	0.300%	59.18%	46.0%	0.005	10.0	0.067	0.027	0.00	0.033	0.006	0.00	0.060	100%

<b>Potential to Emit</b>	<b>Add worst case coating to all solvents</b>	PM	Control Efficiency	90.0%												
			<b>Uncontrolled</b>		<b>10.0</b>	<b>240.8</b>	<b>44.0</b>	<b>3.79</b>								
			<b>Controlled</b>		<b>10.0</b>	<b>240.8</b>	<b>44.0</b>	<b>0.379</b>								

**METHODOLOGY**

Only one (1) stain is applied at a time. Emissions are based on worst case coating.  
Methyl Proxitol Acetate and Butyl Oxitol are only applied when needed based on weather and only one (1) is used at a time.  
Top Coat R-T-S is Ready to Spray mix using worst case mix with Methyl Proxitol Acetate.

Pounds of VOC per Gallon Coating less Water = (Density (lbs/gal) \* Weight % Organics) / (1-Volume % water)  
Pounds of VOC per Gallon Coating = (Density (lbs/gal) \* Weight % Organics)  
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lbs/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr)  
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lbs/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (24 hr/day)  
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lbs/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (8760 hr/yr) \* (1 ton/2000 lbs)  
Particulate Potential Tons per Year = (units/hour) \* (lbs/unit) \* (lbs/gal) \* (1- Weight % Volatiles) \* (1-Transfer efficiency) \*(8760 hrs/yr) \*(1 ton/2000 lbs)  
Pounds VOC per Gallon of Solids = (Density (lbs/gal) \* Weight % organics) / (Volume % solids)  
Total = Worst Coating + Sum of all solvents used

**Appendix A: Emission Calculations  
HAP Emission Calculations**

**Company:** Elkhart Woodworks, Inc.  
**Address:** 52926 Lillian Avenue, Elkhart, Indiana 46514  
**MSOP:** 039-16908  
**Plt ID:** 039-00580  
**Reviewer:** Mark L. Kramer  
**Date:** March 11, 2003

Material	Density (lbs/gal)	Gallons of Material (gal/unit)	Maximum (unit/hr)	Weight % Xylene	Weight % Toluene	Weight % Ethyl Benz	Weight % Glycol Ethe	Weight % Cumene	Weight % MEK	Weight % Methanol	Xylene Emissions	Toluene Emissions	Ethyl Benz Emissions	Glycol Ethe Emissions	Cumene Emissions	MEK Emissions	Methanol Emissions
<b>Stains</b>																	
AL-2047 Replacement	6.53	0.000	10.0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hardwood Carmel Stain	5.85	0.047	10.0	1.00%	0.00%	1.00%	1.00%	2.00%	0.00%	0.00%	0.120	0.00	0.120	0.120	0.241	0.00	0.00
Chocolate Stain	6.09	0.000	10.0	0.110%	0.00%	0.270%	0.220%	1.70%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lite Ash Stain	5.78	0.000	10.0	0.120%	0.00%	0.300%	0.250%	1.90%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lacquer Thinner	7.07	0.001	10.0	5.90%	66.3%	0.00%	0.00%	0.00%	9.49%	9.38%	0.018	0.205	0.00	0.00	0.00	0.029	0.029
<b>Top Coat</b>																	
Valtec S/S W.W. Precat	7.68	0.136	10.0	1.50%	13.0%	1.00%	0.00%	0.00%	0.00%	0.00%	0.686	5.95	0.457	0.00	0.00	0.00	0.00
Methyl Proxitol Acetate	8.03	0.004	10.0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Butyl Oxitol	7.50	0.000	10.0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Assembly</b>																	
Original Wood Glue 506	9.16	0.005	10.0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
											<b>0.825</b>	<b>6.153</b>	<b>0.578</b>	<b>0.120</b>	<b>0.241</b>	<b>0.029</b>	<b>0.029</b>

METHODOLOGY

**Total 7.98**

Only one (1) stain is applied at a time. Emissions are based on worst case coating.

Methyl Proxitol Acetate and Butyl Oxitol are only applied when needed based on weather and only one (1) is used at a time.

Top Coat R-T-S is Ready to Spray mix using worst case mix with Methyl Proxitol Acetate.

HAPS emission rate (tons/yr) = Density (lbs/gal) \* Gal of Material (gal/unit) \* Maximum (unit/hr) \* Weight % HAP \* 8760 hrs/yr \* 1 ton/2000 lbs

**Appendix A: Emissions Calculations      Page 3 of 7 TSD App A**  
**Natural Gas Combustion Only**  
**MM BTU/HR <100**

**Company Elkhart Woodworks, Inc.**  
**Address 552926 Lillian Avenue, Elkhart, Indiana 46514**  
**MSOP: 039-16908**  
**Plt ID: 039-00580**  
**Reviewer: Mark L. Kramer**  
**Date: March 11, 2003**

Heat Input Capacity  
MMBtu/hr

Potential Throughput  
MMCF/yr

3.50

30.7

Four (4) radiant heaters rated at 0.15 MMBtu/hr, each.  
 One (1) air preheater rated at 2.9 MMBtu/hr.

Pollutant						
Emission Factor in lb/MMCF	PM* 1.90	PM10* 7.60	SO2 0.600	NOx 100 **see below	VOC 5.50	CO 84.0
Potential Emission in tons/yr	0.029	0.117	0.009	1.53	0.084	1.29

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03  
 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton



See page 4 for HAPs emissions calculations.

**Appendix A: Emissions Calculations**      **Page 4 of 7 TSD App A**  
**Natural Gas Combustion Only**  
**MM BTU/HR <100**  
**HAPs Emissions**

**Company Elkhart Woodworks, Inc.**  
**Address ( 552926 Lillian Avenue, Elkhart, Indiana 46514**  
**MSOP: 039-16908**  
**Plt ID: 039-00580**  
**Reviewer: Mark L. Kramer**  
**Date: March 11, 2003**

**HAPs - Organics**

Emission Factor in lb/MMcf	Benzene 0.002	Dichlorobenzene 0.001	Formaldehyde 0.075	Hexane 1.80	Toluene 0.003
Potential Emission in tons/yr	0.00003	0.00002	0.001	0.028	0.0001

**HAPs - Metals**

Emission Factor in lb/MMcf	Lead 0.0005	Cadmium 0.001	Chromium 0.001	Manganese 0.0004	Nickel 0.002	Total HAPs
Potential Emission in tons/yr	0.00001	0.00002	0.00002	0.00001	0.00003	0.029

Methodology is the same as page 3.

The five highest organic and metal HAPs emission factors are provided above.  
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Emissions Calculations  
Particulate Matter  
From Woodworking Operations**

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**Company N Elkhart Woodworks, Inc.  
Address Citi 52926 Lillian Avenue, Elkhart, Indiana 46514  
MSOP: 039-16908  
Plt ID: 039-00580  
Reviewer: Mark L. Kramer  
Date: March 11, 2003**

Raw Material (board feet / hour)	Raw Material (pounds / hour)	Saw Kerf (inches)
30.0	108	0.156
Volume of Saw Kerfs (cubic inches)	2.81	
Percent Loss of Saw Kerfs	1.95%	
Estimated Percent Loss of Cutting due to Woodworking	2.10%	
Estimated Percent of Total Particulate Matter Collected	4.05%	Control Efficiency
Amount of Particulate Matter Collected (tons / year)	19.1	Potential to Emit After Controls (tons / year)
Potential to Emit Before Controls (tons/year)	20.1	Potential to Emit After Controls (pounds / hour)

**METHODOLOGY**

Non-dimensioned board feet / hour = 30 (pre-cut and store bought)

Dimensioned board feet / hour = 30 (processed by Elkhart Woodworks, Inc.)

Total board feet / hour = 60

Raw Material (pounds / hour) = ((Raw Material (board feet / hour)) x (144 cubic inch / board feet) x (43 pounds / cubic feet)) / (1728 cubic inch / cubic feet)

Volume of Saw Kerfs (square inches) = Saw Kerf (inch) x 3 inch cut x 12 inches of board

Percent Loss of Saw Kerfs = ((Volume of Saw Kerfs x 100) / (144 cubic inch / board feet)) / 100

Estimated Percent of Particulate Matter Collected = Percent Loss of Saw Kerfs + Estimated Percent Loss of Cutting due to Woodworking

Amount of Particulate Matter Collected (tons / year) = (Raw Material (pounds / hour) x Percent of PM collected x (8760 hours / year)) / (2000 pounds / ton)

Potential to Emit After Controls (tons / year) = Amount of Particulate Matter Collected (tons / year) \* (1 - Control Efficiency)

Potential to Emit Before Controls (tons / year) = Amount of Particulate Matter Collected (tons / year) \*/(Control Efficiency)

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95.0%
1.00
0.229

**Appendix A: Emissions Calculations**  
**Emission Totals**

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**Compan Elkhart Woodworks, Inc.**  
**Address 52926 Lillian Avenue, Elkhart, Indiana 46514**  
**MSOP: 039-16908**  
**Plt ID: 039-00580**  
**Reviewe Mark L. Kramer**  
**Date: March 11, 2003**

**Uncontrolled Emissions (tons per year)**

<b>Facility</b>	<b>PM</b>	<b>PM10</b>	<b>SO2</b>	<b>NOx</b>	<b>VOC</b>	<b>CO</b>	<b>HAPs</b>
Surface Coating / Ass	3.79	3.79	0.00	0.00	44.0	0.00	7.98
Combustion	0.029	0.117	0.009	1.53	0.084	1.29	0.029
Woodworking	20.1	20.1	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>23.9</b>	<b>24.0</b>	<b>0.009</b>	<b>1.53</b>	<b>44.1</b>	<b>1.29</b>	<b>8.01</b>

**Controlled Emissions (tons per year)**

<b>Facility</b>	<b>PM</b>	<b>PM10</b>	<b>SO2</b>	<b>NOx</b>	<b>VOC</b>	<b>CO</b>	<b>HAPs</b>
Surface Coating / Ass	0.379	0.379	0.00	0.00	44.0	0.00	7.98
Combustion	0.029	0.117	0.009	1.53	0.084	1.29	0.029
Woodworking	1.00	1.00	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>1.41</b>	<b>1.50</b>	<b>0.009</b>	<b>1.53</b>	<b>44.1</b>	<b>1.29</b>	<b>8.01</b>

**Appendix A: Emissions Calculations**  
**Emission Totals**

Page 7 of 7 App A

**Compan Elkhart Woodworks, Inc.**  
**Address 52926 Lillian Avenue, Elkhart, Indiana 46514**  
**MSOP: 039-16908**  
**Plt ID: 039-00580**  
**Reviewe Mark L. Kramer**  
**Date: March 11, 2003**

**HAPs Emissions (tons per year)**

<b>Facility</b>	<b>Xylene</b>	<b>Toluene</b>	<b>Glycol Ethers</b>	<b>MEK</b>	<b>Methanol</b>	<b>Ethyl Benze</b>	<b>Manganese</b>	<b>Nickel</b>
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Surface Coating / Ass	0.825	6.15	0.120	0.029	0.029	0.578	0.00	0.00
Combustion	0.00	0.0001	0.000	0.000	0.000	0.00	1E-05	3E-05
Woodworking	0.00	0.00	0.000	0.000	0.000	0.00	0.00	0.00
<b>Subtotal</b>	<b>0.825</b>	<b>6.15</b>	<b>0.120</b>	<b>0.029</b>	<b>0.029</b>	<b>0.578</b>	<b>0.00001</b>	<b>*****</b>

Facility	Chromium	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Lead	Cadmium	Cumen
Surface Coating / Ass	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.241
Combustion	2E-05	3E-05	2E-05	0.001	0.028	1E-05	2E-05	0.000
Woodworking	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000
<b>Subtotal</b>	<b>0.00002</b>	<b>0.00003</b>	<b>0.00002</b>	<b>0.001</b>	<b>0.028</b>	<b>0.00001</b>	<b>0.00002</b>	<b>0.241</b>

Facility	HAPs
Surface Coating / Ass	<b>7.98</b>
Combustion	<b>0.029</b>
Woodworking	<b>0.00</b>
<b>Total</b>	<b>8.01</b>